Exhibit Y. Foti - Highway 18 Wetlands Delineation Report

DDG
DUPLANTIS DESIGN GROUP, PC

Baton Rouge Area Chamber®

Wetland Data Report

Foti Highway 18

Ascension Parish, Louisiana

Baton Rouge Area Chamber

564 Laurel Street

Baton Rouge, Louisiana 70801

December 2017

Prepared by:

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CK Project Number: 15388

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1.0 INTRODUCTION

The following report summarizes a wetland delineation conducted by CK Associates (CK) on a 23.02-acre survey area (site) near Donaldsonville, Louisiana. The purpose of this report is to identify areas that contain potential wetlands and other potential "Waters of the United States" (US) as defined in 33 C.F.R. § 328.3. The site is located east of the intersection of Highways 18 and 3120 in Ascension Parish at latitude 30°6'08.49"N and longitude 90°56'49.57"W within Sections 10 of Township 11 South and Range 15 East.

Waters of the US are aquatic areas that are either navigable or have a significant nexus to a navigable water. These areas are regulated by the US Army Corps of Engineers (USACE). Navigable waters are defined as "those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce" (33 C.F.R. § 329.4 [1986]). Any area below the ordinary high water mark, as defined in 33 C.F.R. § 328.3 (1993), may fall under Federal jurisdiction as a navigable water (33 C.F.R. § 329.11 [1986]).

Waters of the US, regardless of navigability, can generally be categorized as either: 1) deepwater aquatic habitats, 2) special aquatic sites, or 3) other waters of the US. Deepwater aquatic habitats are "areas that are permanently inundated at mean annual water depths greater than 6.6 feet or permanently inundated areas, less than or equal to 6.6 feet in depth that do not support rooted-emergent or woody plant species". Special aquatic sites include 1) sanctuaries and refuges, 2) wetlands, 3) mudflats, 4) vegetated shallows, 5) coral reefs, and 6) riffle and pool complexes. Other waters of the US include, but are not limited to 1) isolated wetlands and lakes, 2) intermittent streams, 3) prairie potholes, and 4) other waters that are not part of a tributary system to interstate waters or navigable waters of the US (USACE 1987).

Wetlands are classified as a special aquatic site and are defined as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (USACE 1987). These areas are referred to as "wetlands" throughout this report whereas deepwater aquatic habitats, special aquatic sites, streams, and other waters of the US are referred to as "other waters" in this report.

Three mandatory technical criteria for determining the presence of a wetland are, with exceptions, 1) prevalence of hydrophytic vegetation, 2) wetland hydrology, and 3) hydric soils (USACE 1987). Hydrophytic vegetation is defined as "the sum total of macrophytic plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content" (USACE 1987). The term wetland hydrology encompasses "the sum total of wetness characteristics in areas that are inundated or have saturated soils for a sufficient duration to support hydrophytic vegetation" (USACE 1987). A hydric soil is defined as "a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (USDA 2010).

2.0 PHYSIOGRAPHY, CLIMATE, AND SITE DESCRIPTION

The site is located within Land Resource Region (LRR) O – Mississippi Delta Cotton and Feed Grains Region, in Major Land Resource Area (MLRA) 131A – Southern Mississippi River Alluvium. The topography of MLRA 131A is characterized by level or depressional to very undulating alluvial plains, backswamps, oxbows, natural levees, and terraces. Average elevations start at sea level in the southern part of the area and gradually rise to about 330 feet in the northwestern part. The lower Mississippi River and its tributaries drain nearly all of MLRA 131A, but the Atchafalaya River drains the extreme southwest part (USDA 2006).

The dominant soils in the survey area are typically found in humid subtropical climates. Annual rainfall in these areas averages 52-70 inches, and mean annual temperature is 52-79 degrees Fahrenheit. Soils at the site are somewhat poorly drained; runoff is negligible and permeability is high to moderately high.

The site is primarily pasture. The only structures present are located near Highway 18 in the northwestern portion of the site. The Mississippi River levee is located on the opposite side of Highway 18 on the northwest side of the site. A large industrial facility is located southwest of the site. The site is bordered on the southeastern and northeastern sides by residential areas.

3.0 METHODS

CK visited the survey area September 7, 2017 to determine the extent of potential wetlands and other waters of the US. The wetland delineation followed routine onsite field procedures as outlined by the USACE (1987 and 2010). Soil references include the NRCS (2015 and 2017) and USDA (2010). Plant nomenclature and wetland indicator status is taken from The National Wetland Plant List (Lichvar et al. 2016). Plant nomenclature not listed in The National Wetland Plant List is taken from the NRCS PLANTS Database (2017).

Prior to conducting the field investigation, CK reviewed available aerial photography, soil survey data, elevation data (Light Detection and Ranging [LiDAR] contours and Digital Elevation Models [DEM]), topographic maps, and National Wetland Inventory (NWI) data. Data points were established within the dominant plant communities of the survey area. Observations of soils, vegetation, and hydrology were documented at each data point location (Attachment A). Potential wetlands, potential waters of the US, and data point locations were mapped utilizing Trimble® GeoXT® Differential Global Positioning System (DGPS) with real-time corrections. Acreage was obtained by exporting the data from the DGPS unit into ESRI® ArcMap Version 10.4. Digital photographs were taken of the soil profile and surrounding vegetation at each data point (Attachment A).

Wetland hydrology was based on the observation of wetland hydrology indicators, as described by USACE (2010). Wetland hydrology criteria were met if one primary indicator was observed or a minimum of two secondary indicators were observed.

All vegetative species present within each data point plot were documented for all vegetation strata, including the tree stratum, sapling/shrub stratum, herbaceous stratum, and woody vines stratum. Percent absolute cover for each species was determined by ocular estimation. Plant communities met hydrophytic vegetation criteria if all dominant species across all strata are classified as obligatory and/or facultative-wet, or if greater than 50% of all dominant species from all strata were classified as obligatory, facultative-wet, and/or facultative species, or if the prevalence index is 3.0 or less (USACE 2010). Dominant species were selected using the "50/20 rule" described by the USACE (2010).

Soil profiles were obtained by excavating an approximate 12- to 16-inch soil pit. Soil color was recorded by matching soil samples throughout the profile to color chips contained in a Munsell soil color chart. The presence or absence of hydric soils was determined utilizing the methods and procedures outlined by the USACE (2010), including, but not limited to, the observation of the hydric soil indicators described by the USACE (2010).

4.0 RESULTS

Three data points (DP) were collected during the field investigation. None of the data points collected were located within wetlands.

4.1 Hydrology

No primary hydrology indicators were observed at any of the data points. Surface water was present in several small drainage features located throughout the site. These drains are connected to a drainage ditch southeast of the site. Roadside ditches are present along the northwestern and southwestern borders of the site. Another drainage ditch runs along the northeastern side of the site.

4.2 Vegetation

The site is primarily pasture and dominated by herbaceous species such as bahiagrass (*Paspalum notatum*), yellow foxtail (*Setaria pumila*), dallisgrass (*Paspalum dilitatum*), Bermudagrass (*Cynodon dactylon*), and dotted smartweed (*Persicaria punctate*). Trees such as eastern cottonwood (*Populus deltoids*) and live oak (*Quercus virginiana*) are located sporadically across the site.

4.3 Soils

The survey area is underlain by the following soils (Figure 4):

a. Cm: Commerce silt loam, 0 to 1 percent slopes
b. Co: Commerce silty clay loam

Both soils are listed as hydric in the NRCS Hydric Soils list. Hydric soils were observed at DP2 and DP3. A depleted matrix was present in the soil profiles at both data points.

5.0 CONCLUSIONS

Based on field observations, the 23.02-acre survey area contains (Figure 2 and Figure 3):

- 0.12 acres of Section 404 Other Waters of the US
- 0.05 acres of Section 404 Wetlands

This acreage is influenced by the accuracy of the DGPS unit utilizing real-time corrections and ESRI® ArcMap Version 10.4 drafting software.

The USACE, under the authority of the Clean Water Act - Section 404 and the Rivers and Harbor Act - Section 10, has the responsibility to make the final determination of the location and extent of jurisdictional wetlands, other waters of the US, and navigable waters on this property. This report represents the opinion of the investigators and should be considered preliminary until final concurrence is obtained from the New Orleans District Army Corps of Engineers office.

6.0 LITERATURE CITED

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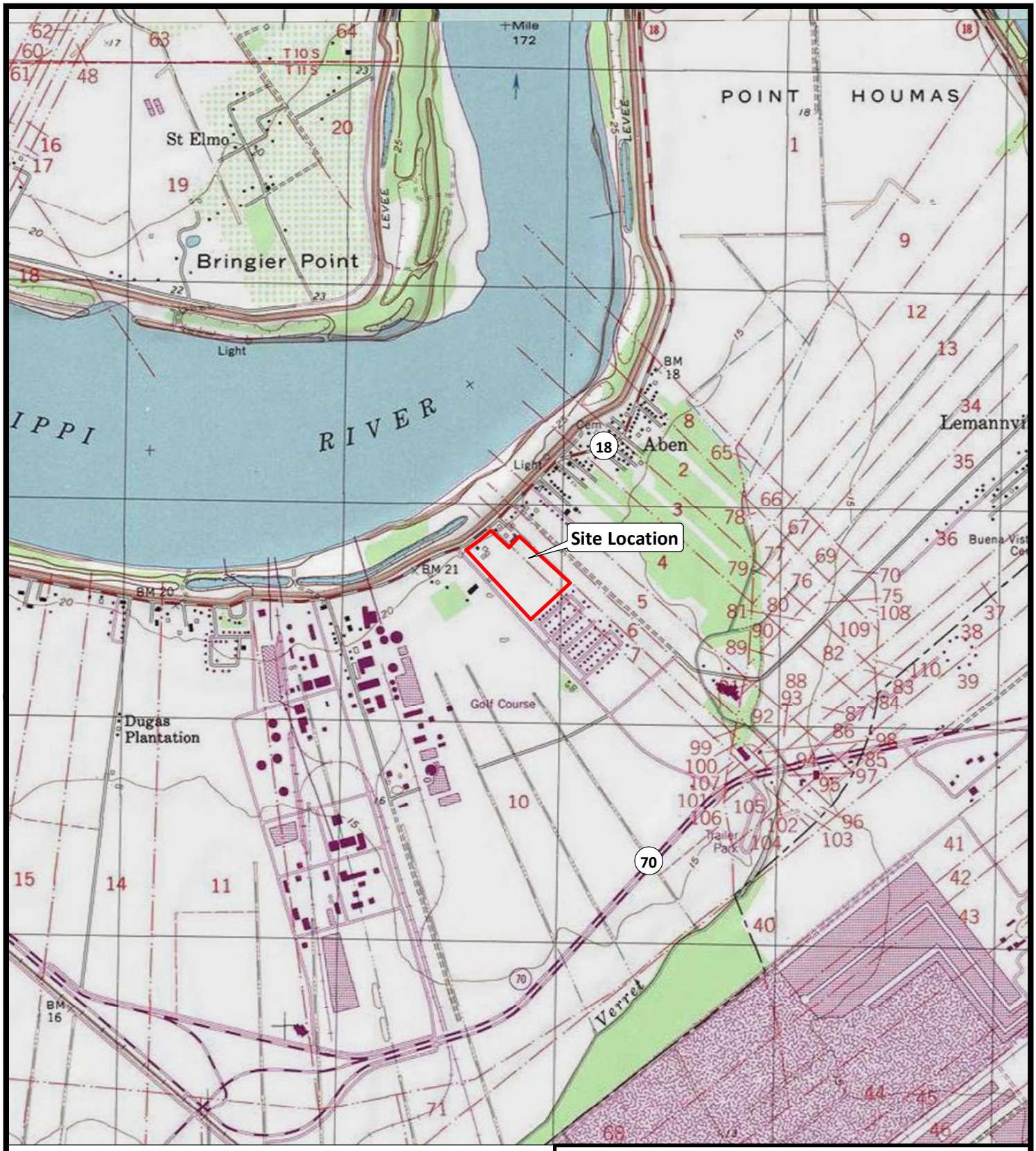
FIGURES



N

S

Ascension Parish

0 2,000

Feet

USGS 24K Series Topo Map, Donaldsonville, LA.

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Baton Rouge Area Chamber

Baton Rouge, Louisiana

Wetland Delineation

Site Location Map

Ascension Parish

CK Associates Environmental Consultants

Drawn:	CAL	Checked:	ELP
Date:	09/26/17	Approved:	TEW
Dwg. No.:	A15388-01	**Figure 1**	

Legend

- Data Point
- Potential Waters of the US (0.12 acres)
- Potential Wetlands (0.05 acres)
- Survey Boundary (23.02 acres)

N

S

0 200

Feet

Imagery: 2015 NAIP, USDA FSA, 8/27/15.

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Baton Rouge, Louisiana

Wetland Delineation

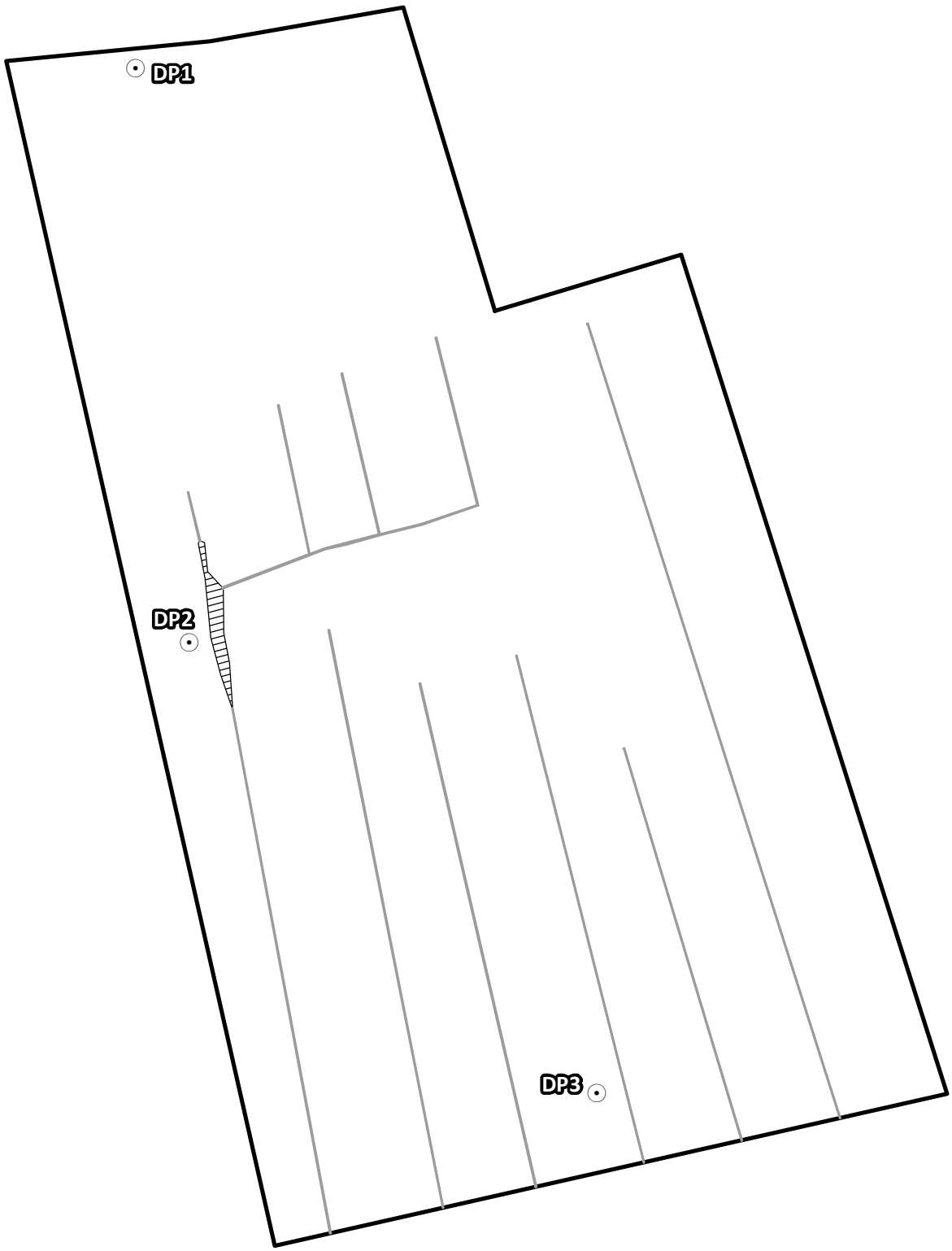
Wetland Map

(Aerial Imagery)

Ascension Parish

CK Associates Environmental Consultants

Drawn:	CPL	Checked:	ELP
Date:	12/27/17	Approved:	TEW
Dwg. No.:	A15388-02	**Figure 2**	



Legend

- Data Point
- Potential Waters of the US (0.12 acres)
- Potential Wetlands (0.05 acres)
- Survey Boundary (23.02 acres)

N

S

0 200

Feet

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Baton Rouge, Louisiana

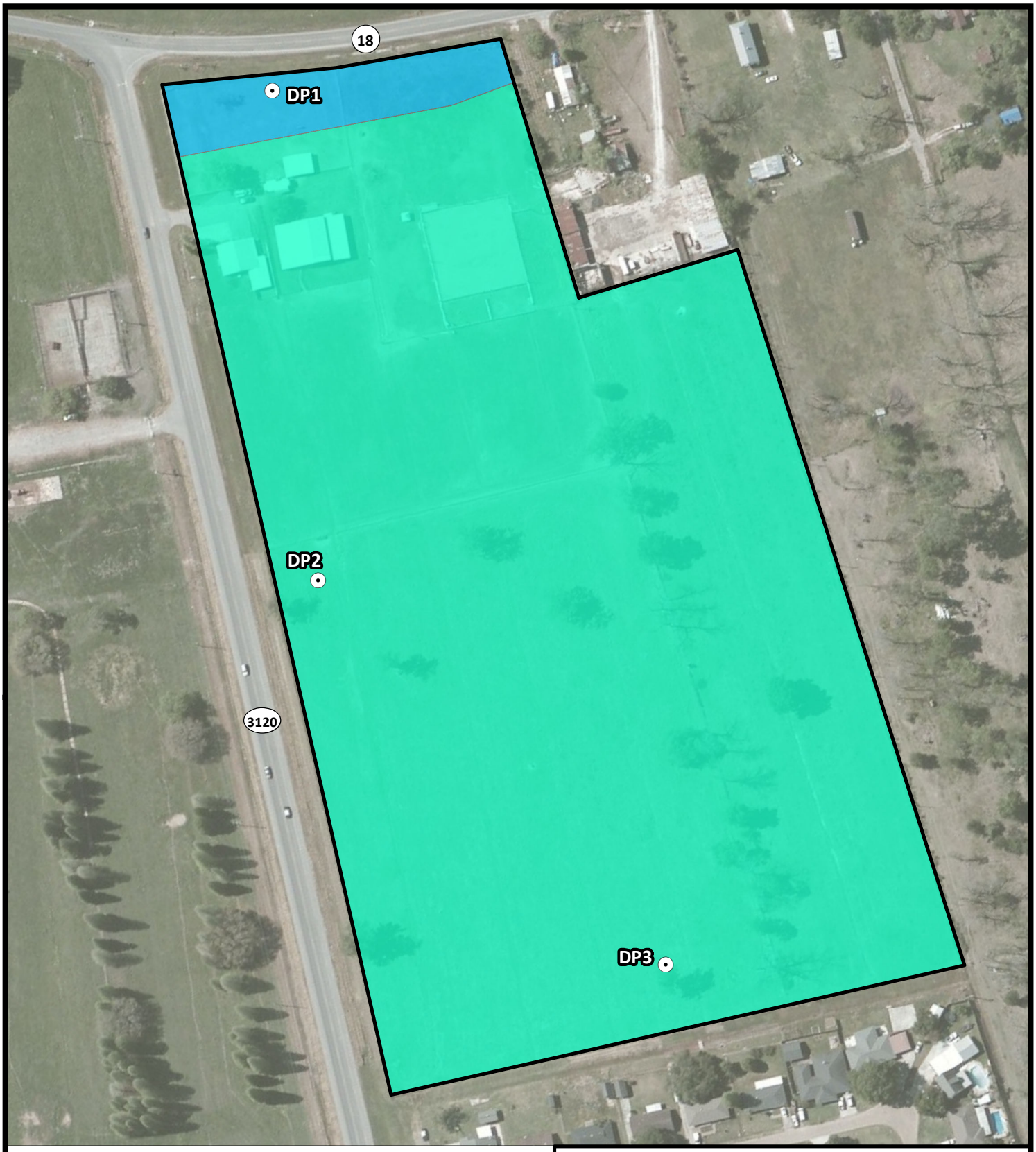
Wetland Delineation

Wetland Map

Ascension Parish

CK Associates Environmental Consultants

Drawn:	CPL	Checked:	ELP
Date:	12/27/17	Approved:	TEW
Dwg. No.:	A15388-03	**Figure 3**	



Legend

- Data Point
- Survey Boundary (23.02 acres)

Soil Data

- Cm - Commerce silt loam, 0 to 1 percent slopes (H)
- Co - Commerce silty clay loam (H)

0 200 Feet

Imagery: 2015 NAIP, USDA FSA, 8/27/15.
Soils Data:USDA NRCS Soil Survey Geographic (SSURGO) database for Ascension Parish, LA.
(H) - Indicates Hydric Soil: USDA NRCS 2015 National Hydric Soils List.

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Baton Rouge Area Chamber
Baton Rouge, Louisiana

Wetland Delineation

Soils Map

Ascension Parish

CK Associates Environmental Consultants

Drawn:	CAL	Checked:	ELP
Date:	09/26/17	Approved:	TEW
Dwg. No.:	A15388-04	**Figure 4**	

APPENDIX A
Wetland Determination Data Forms
&
Site Photographs

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Foti Highway 18 City/County: Ascension Sampling Date: 9/7/2017

Applicant/Owner: BRAC State: Louisiana Sampling Point: DP 1

Investigator(s): Lee Patterson Section, Township, Range: 10T11SR15E

Landform (hillslope, terrace, etc.): Field Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR or MLRA): 131A Lat: 30.103385 Long: -90.949387 Datum: NAD83

Soil Map Unit Name: Commerce silt loam, 0 to 1 percent slopes NWI Classification:

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? No Hydric soil present? No Indicators of wetland hydrology present? No	**Is the Sampled Area within a Wetland?** **No**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that ap

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Wetland Hydrology Present? **No**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: DP 1

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
6			
7			
8			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Sapling/Shrub Stratum (Plot size: 30 feet)			
1			
2			
3			
4			
5			
6			
7			
8			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Herb stratum (Plot size: 30 feet)			
1 *Setaria pumila*	35	Y	FAC
2 *Paspalum notatum*	30	Y	FACU
3 *Cynodon dactylon*	30	Y	FACU
4 *Paspalum dilatatum*	20	N	FAC
5 *Iva annua*	3	N	FAC
6 *Hydrocotyle umbellata*	2	N	OBL
7			
8			
9			
10			
11			
12			
	120 = Total Cover		
50% of total cover: 60	20% of total cover: 24		

Woody vine stratum (Plot size: 30 feet)			
1			
2			
3			
4			
5			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 3 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 33.33% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	2	x 1 =	2
FACW species		x 2 =	0
FAC species	58	x 3 =	174
FACU species	60	x 4 =	240
UPL species		x 5 =	0
Column totals	120 (A)		416 (B)

Prevalence Index = B/A = 3.47

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- ___ Prevalence index is ≤3.0*
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **No**

Remarks: (If observed, list morphological adaptations below).

SOIL Sampling Point: DP 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	10YR 4/2	100					Silt Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- ___ Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **No**

Remarks:

Vegetation at DP1 facing north taken 9/7/2017

Vegetation at DP1 facing east taken 9/7/2017

Vegetation at DP1 facing south taken 9/7/2017

Vegetation at DP1 facing west taken 9/7/2017

Soil profile at DP1 taken 9/7/2017

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Foti Highway 18 City/County: Ascension Sampling Date: 9/7/2017

Applicant/Owner: BRAC State: Louisiana Sampling Point: DP 2

Investigator(s): Lee Patterson Section, Township, Range: 10T11SR15E

Landform (hillslope, terrace, etc.): Depression in pasture Local relief (concave, convex, none): concave Slope (%): 0

Subregion (LRR or MLRA): 131A Lat: 30.101863 Long: -90.948153 Datum: NAD83

Soil Map Unit Name: Commerce silty clay loam NWI Classification:

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? Yes Hydric soil present? Yes Indicators of wetland hydrology present? No	**Is the Sampled Area within a Wetland?** **No**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that ap

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Wetland Hydrology Present? **No**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: DP 2

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1			
2			
3			
4			
5			
6			
7			
8			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Sapling/Shrub Stratum (Plot size: 30 feet)			
1			
2			
3			
4			
5			
6			
7			
8			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Herb stratum (Plot size: 30 feet)			
1 *Persicaria punctata*	75	Y	OBL
2 *Paspalum notatum*	25	Y	FACU
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
	100 = Total Cover		
50% of total cover: 50	20% of total cover: 20		

Woody vine stratum (Plot size: 30 feet)			
1			
2			
3			
4			
5			
	0 = Total Cover		
50% of total cover: 0	20% of total cover: 0		

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	75	x 1 =	75
FACW species		x 2 =	0
FAC species		x 3 =	0
FACU species	25	x 4 =	100
UPL species		x 5 =	0
Column totals	100 (A)		175 (B)

Prevalence Index = B/A = 1.75

Hydrophytic Vegetation Indicators:

- ___ Rapid test for hydrophytic vegetation
- ___ Dominance test is >50%
- X Prevalence index is ≤3.0*
- ___ Problematic hydrophytic vegetation* (explain)

*Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Definitions of Four Vegetation Strata

Tree- Woody plants, excluding woody vines, approximately 20 ft (6m) or more in height and less than 3 in. (7.6 cm) DBH.

Sapling/Shrub - Woody plants, excluding vines, less than 3 in. DBH and greater than 3.26 ft (1m) tall

Herb - All herbaceous (non-woody) plants, including herbaceous vines, regardless of size, and woody plants, except woody vines, less than approximately 3 ft (1 m) in height.

Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **Yes**

Remarks: (If observed, list morphological adaptations below).

SOIL Sampling Point: DP 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	2.5Y 4/1	97	2.5Y 4/4	3	C	M	Silty Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

Hydric Soil Indicators:

- ___ Histisol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Organic Bodies (A6) **(LRR P, T, U)**
- ___ 5 cm Mucky Mineral (A7) **(LRR P, T, U)**
- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
- ___ Polyvalue Below Surface (S8) **(LRR S, T, U)**
- ___ Thin Dark Surface (S9) **(LRR S, T, U)**
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- X Depleted Ochric (F11) **(MLRA 151)**
- ___ Iron-Manganese Masses (F12) **(LRR O, P, T)**
- ___ Umbric Surface (F13) **(LRR P, T, U)**
- ___ Delta Ochric (F17) **(MLRA 151)**
- ___ Reduced Vertic (F18) **(MLRA 150A, 150B)**
- ___ Piedmont Floodplain Soils (F19) **(MLRA 149A)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 149A, 153C, 153D)**

Indicators for Problematic Hydric Soils:

- ___ 1 cm Muck (A9) **(LRR O)**
- ___ 2 cm Muck (A10) **(LRR S)**
- ___ Reduced Vertic(F18) **(outside MLRA 150A,B)**
- ___ Piedmont Floodplain Soils (F19) **(LRR P, S, T)**
- ___ Anomolous Bright Loamy Soils (F20) **(MLRA 153B)**
- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

Vegetation at DP2 facing north taken 9/7/2017

Vegetation at DP2 facing east taken 9/7/2017

Vegetation at DP2 facing south taken 9/7/2017

Vegetation at DP2 facing west taken 9/7/2017

Soil profile at DP2 taken 9/7/2017

WETLAND DETERMINATION DATA FORM - Atlantic and Gulf Coastal Plain Region

Project/Site: Foti Highway 18 City/County: Ascension Sampling Date: 9/7/2017

Applicant/Owner: BRAC State: Louisiana Sampling Point: DP 3

Investigator(s): Lee Patterson Section, Township, Range: 10T11SR15E

Landform (hillslope, terrace, etc.): Pasture Local relief (concave, convex, none): none Slope (%): 0

Subregion (LRR or MLRA): 131A Lat: 30.101253 Long: -90.946008 Datum: NAD83

Soil Map Unit Name: Commerce silty clay loam NWI Classification:

Are climatic/hydrologic conditions of the site typical for this time of the year? **Yes** (If no, explain in remarks)

Are vegetation ____, soil ____, or hydrology ____ significantly disturbed? Are "normal circumstances" present? **Yes**

Are vegetation ____, soil ____, or hydrology ____ naturally problematic? (If needed, explain any answers in remarks.)

SUMMARY OF FINDINGS -- Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic vegetation present? No Hydric soil present? Yes Indicators of wetland hydrology present? No	**Is the Sampled Area within a Wetland?** **No**

Remarks:

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that ap

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15) **(LRR U)**
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Moss Trim Lines (B16)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)
- ___ Sphagnum moss (D8) **(LRR T, U)**

Field Observations:

Surface water present?	Yes	____	No	X	Depth (inches): ____
Water table present?	Yes	____	No	X	Depth (inches): ____
Saturation present? (includes capillary fringe)	Yes	____	No	X	Depth (inches): ____

Wetland Hydrology Present? **No**

Describe recorded data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

VEGETATION -- Use scientific names of plants.

Sampling Point: DP 3

Tree Stratum (Plot size: 30 feet)	Absolute % Cover	Dominant Species	Indicator Staus
1 *Populus deltoides*	15	Y	FAC
2			
3			
4			
5			
6			
7			
8			
	15 = Total Cover		

50% of total cover: 7.5 20% of total cover: 3

Sapling/Shrub Stratum (Plot size: 30 feet)			
1			
2			
3			
4			
5			
6			
7			
8			
	0 = Total Cover		

50% of total cover: 0 20% of total cover: 0

Herb stratum (Plot size: 30 feet)			
1 *Paspalum notatum*	90	Y	FACU
2 *Paspalum urvillei*	10	N	FAC
3 *Persicaria punctata*	5	N	OBL
4			
5			
6			
7			
8			
9			
10			
11			
12			
	105 = Total Cover		

50% of total cover: 52.5 20% of total cover: 21

Woody vine stratum (Plot size: 30 feet)			
1			
2			
3			
4			
5			
	0 = Total Cover		

50% of total cover: 0 20% of total cover: 0

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across all Strata: 2 (B)

Percent of Dominant Species that are OBL, FACW, or FAC: 50.00% (A/B)

Prevalence Index Worksheet

Total % Cover of:

OBL species	5	x 1 =	5
FACW species		x 2 =	0
FAC species	25	x 3 =	75
FACU species	90	x 4 =	360
UPL species		x 5 =	0
Column totals	100 (A)		440 (B)

Prevalence Index = B/A = 4.4

Hydrophytic Vegetation Indicators:

- Rapid test for hydrophytic vegetation
- Dominance test is >50%
- Prevalence index is ≤3.0*
- Problematic hydrophytic vegetation* (explain)

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Woody vine - All woody vines, regardless of height.

Hydrophytic Vegetation Present? **No**

Remarks: (If observed, list morphological adaptations below).

SOIL Sampling Point: DP 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (Inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type*	Loc**		
0-16	10YR 4/1	95	10YR 4/4	5	C	M	Silty Clay Loam	

*Type: C = Concentration, D = Depletion, RM = Reduced Matrix, MS = Masked Sand Grains. **Location: PL = Pore Lining, M = Matrix

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- ___ Muck Presence (A8) **(LRR U)**
- ___ 1 cm Muck (A9) **(LRR P, T)**
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Coast Prairie Redox (A16) (**MLRA 150A)**
- ___ Sandy Mucky Mineral (S1) **(LRR O, S)**
- ___ Sandy Gleyed Matrix (S4)
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- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) **(LRR P, S, T, U)**
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- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Marl (F10) **(LRR U)**
- X Depleted Ochric (F11) **(MLRA 151)**
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- ___ Red Parent Material (TF2)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (explain in remarks)

*Indicators of hydrophytic vegetation and weltand hydrology must be present, unless disturbed or problematic

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes**

Remarks:

Vegetation at DP3 facing north taken 9/7/2017

Vegetation at DP3 facing east taken 9/7/2017

Vegetation at DP3 facing south taken 9/7/2017

Vegetation at DP3 facing west taken 9/7/2017

Soil profile at DP3 taken 9/7/2017

Typical drainage feature taken 9/7/2017

Typical drainage feature taken 9/7/2017